

Title (en)

A SCALABLE FLASH EEPROM MEMORY CELL, METHOD OF MANUFACTURING AND OPERATION THEREOF

Title (de)

SKALIERBARE FLASH EEPROM SPEICHERZELLE SOWIE IHR HERSTELLUNGSVERFAHREN UND IHRE ANWENDUNG

Title (fr)

CELLULE ECHELONNABLE DE MEMOIRE FLASH EEPROM, PROCEDE DE FABRICATION ET UTILISATION

Publication

**EP 0963586 B1 20030507 (EN)**

Application

**EP 98906061 A 19980130**

Priority

- US 9801818 W 19980130
- US 79186397 A 19970131

Abstract (en)

[origin: WO9834233A1] A scalable flash EEPROM cell has a semiconductor substrate (12) with a drain (16) and a source (14) and a channel (18) therebetween. A select gate (20) is positioned over a portion of the channel and is insulated therefrom. A floating gate (24) has a first portion (26) over the select gate and insulated therefrom, and a second portion (28) over a second portion of the channel and over the source, and is between the select gate and the source. A control gate (30) is over the floating gate and is insulated therefrom. A memory array using this memory cell is also disclosed.

IPC 1-7

**G11C 16/04**; **H01L 29/76**; **H01L 29/788**; **H01L 21/70**

IPC 8 full level

**G11C 16/04** (2006.01); **H01L 21/28** (2006.01); **H01L 21/8247** (2006.01); **H01L 29/423** (2006.01); **H01L 29/788** (2006.01); **H01L 29/792** (2006.01); **H10B 69/00** (2023.01)

CPC (source: EP KR US)

**G11C 16/0425** (2013.01 - EP US); **G11C 16/0433** (2013.01 - EP US); **G11C 16/0491** (2013.01 - EP US); **H01L 29/40114** (2019.08 - EP US); **H01L 29/42324** (2013.01 - EP US); **H01L 29/42328** (2013.01 - EP US); **H10B 69/00** (2023.02 - KR)

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